

## REMARKS

Claims 1 and 4-9 are now pending in the application. Claims 2 and 3 have been cancelled, without prejudice. New Claims 8 and 9 have been added which simply correct the improper multiple dependency from Claim 5 of Claims 6 and 7. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

## REJECTIONS UNDER 35 U.S.C. § 102 AND § 103

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Ito et al. (US 4,778,782). Claims 3-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ito (U.S. Pat. No. 4,778,782) as applied to claim 1, above, in further view of Oshima (U.S. Pat. No. 6,688,789 B2). These rejections are respectfully traversed.

Claim 1 recites "an identification mark being ***embedded in the substrate*** and provided ***between said plurality of sheets*** so that the identification mark being ***unable to be visually perceived from the external appearance*** of the image forming sheet, and said substrate being ***whitish thereby concealing the identification mark from human's eyes.***" (Emphasis added)

Despite the Examiner's continued assertion to the contrary, Ito merely discloses that the detection mark is provided ***on the surface*** of the core material of the substrate as described in Claim 18 (col. 18, line 17) and preferably ***on the back surface*** (col. 9, line 20). This is true because the detection mark disclosed in Ito is detectable with a ***photoelectric tube detecting device***. Such a photoelectric tube detecting device can

only detect visible marks. In other words, such photoelectric tube detecting devices are **not able to detect** any **non-visible** mark. Thus, the mark of Ito would not be detectable if it were **embedded** in a substrate **between** a plurality of substrate sheets so that the mark was **unable to be visually perceived** and **concealed** from human eyes due to the whitish substrate as claimed. Therefore, not only does Ito not disclose or suggest the concealed, non-visible mark as recited in claim 1, but one skilled in the art would not be motivated to modify Ito to conceal the mark. Such a modified structure would make the mark of Ito undetectable - completely **destroying its functionality**. Accordingly, the Examiner's assertion that **Ito alone** anticipates or renders obvious Claim 1 could only be based completely on impermissible hindsight.

Oshima is concerned with a specific use of a detection mark. However, the basic feature of the Oshima patent resides in that the detection mark is formed **on the surface** of a sheet-like carrier such as a label or a post card by means of an ink jet printer as shown in Figure 27. Thus, - like Ito - Oshima only discloses that the detection mark is located on a substrate **surface** in a position so that it can be visually perceived. Like Ito, Oshima does not disclose or suggest that any detection mark should be **embedded between** substrate sheets so that it is **unable to be visually perceived** and is **concealed** from human eyes due to the whitish substrate as claimed. In other words, the invention disclosed in Oshima merely corresponds to Comparative Example 1 of the present specification. Far from suggesting there would be some benefit to locating the mark in a position where it would not be visible, Oshima teaches the best location to place the mark is in a visible location. Therefore, Oshima **teaches away** from the present invention. Accordingly, the Examiner's assertion that **Ito combined with**

**Oshima** renders obvious Claim 1 seems to likewise be based completely on impermissible hindsight.

In addition, Claim 1 recites "said identification mark comprising a mark . . . containing a material which is capable of **absorbing an electromagnetic radiation with a wavelength  $\lambda 1$**  and is capable of **emitting an electromagnetic radiation with a wavelength  $\lambda 2$**  being different from the wavelength  $\lambda 1$ . This is neither disclosed, nor suggested by Ito alone. In addition, although Oshima may disclose the use of such material in relation to an exposed detection mark on a substrate surface, Oshima **does not** disclose the use of such a material in a **embedded between** substrate sheets so that it is **unable to be visually perceived** and is **concealed** from human eyes due to the whitish substrate as claimed.

Further, applicants believe it is unclear whether the marks including such a material as disclosed in Oshima would be excitable if the mark was placed in a position so that it was **embedded between** substrate sheets where the substrate is **whitish**; thereby **concealing** the mark as claimed. In order to establish a *prima facie* case of obviousness, Applicants respectfully assert that the Examiner must explain the reasoning and justification behind this inherency argument in detail. For example, what is the basis for the Examiner's assertion that the disclosed wavelength radiation would (1) be able to penetrate into the claimed substrate sheets sufficiently to excite the mark materials disclosed in Oshima - if the mark was embedded between whitish substrate sheets as claimed - and (2) that the resulting emitted radiation would likewise be able to penetrate out of the claimed substrate sheets sufficiently to be detectable? Again, the

Examiner's assertion that *Ito combined with Oshima* renders obvious these features of Claim 1 seems to similarly be based completely on impermissible hindsight.


For at least the reasons discussed above, Applicants respectfully believe that the invention as recited in Claim 1 is neither disclosed nor suggested by Ito and Oshima, either alone or in combination. Since each of the remaining claims depends from Claim 1, Applicants respectfully believe that the remaining claims are likewise patentable for at least the reasons discussed above.

#### CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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